

	Applicati n No.	Applicant(s)
	Applicati it No.	Applicant(s)
Nation of Allowahility	10/619,389	FREEMAN, GARY A.
Notice of Allowability	Examiner	Art Unit
	Timothy L Rude	2871
The MAILING DATE of this communication appearance All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIOF the Offic or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in this app or other appropriate communication IGHTS. This application is subject to	plication. If not included will be mailed in due course. <b>THIS</b>
1. $\boxtimes$ This communication is responsive to <u>response filed 25 Jur</u>	<u>ne 2004</u> .	
2. A The allowed claim(s) is/are 19-61.		
3. The drawings filed on 15 July 2003 are accepted by the Examiner.		
<ul> <li>4. ☐ Acknowledgment is made of a claim for foreign priority ur</li> <li>a) ☐ All b) ☐ Some* c) ☐ None of the:</li> <li>1. ☐ Certified copies of the priority documents have</li> <li>2. ☐ Certified copies of the priority documents have</li> <li>3. ☐ Copies of the certified copies of the priority do International Bureau (PCT Rule 17.2(a)).</li> <li>* Certified copies not received:</li> </ul>	e been received. e been received in Application No	
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.	of this communication to file a reply IENT of this application.	complying with the requirements
5. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give		
6. CORRECTED DRAWINGS ( as "replacement sheets") mus	st be submitted.	
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached		
1) 🗌 hereto or 2) 🔲 to Paper No./Mail Date		
(b) ☐ including changes required by the attached Examiner's Paper No./Mail Date	s Amendment / Comment or in the C	Office action of
Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in t	.84(c)) should be written on the drawir	ngs in the front (not the back) of d).
DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT	sit of BIOLOGICAL MATERIAL r	nust be submitted. Note the
Attachment(s)  1. ☐ Notice of References Cited (PTO-892)	<del>_</del>	Patent Application (PTO-152)
2. Notice of Draftperson's Patent Drawing Review (PTO-948)	<ol> <li>Interview Summary Paper No./Mail Dat</li> </ol>	
3. Information Disclosure Statements (PTO-1449 or PTO/SB/0 Paper No./Mail Date		ment/Comment
4. Examiner's Comment Regarding Requirement for Deposit		ent of Reasons for Allowance
of Biological Material	9. 🗌 Oth r	
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## **DETAILED ACTION**

## Terminal Disclaimer

The terminal disclaimer filed on 25 June 2004 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of USPAT 6,618,114 B2 and 6,606,142 as well as patents issued for Applications 10/309,908 and 09/882,272 has been reviewed and is accepted. The terminal disclaimer has been recorded.

## Allowable Subject Matter

Claims 19-61 are allowed.

The following is an examiner's statement of reasons for allowance:

As to claim 19, relevant prior art of record did not disclose, alone or in combination, a method for manufacturing a liquid crystal display device as claimed, wherein: if at least a portion of the spacers are coated with the photoinitiator, polymerization is initiated by exposing a first side of the liquid crystal cell and a second side of the liquid crystal cell to ultraviolet light causing scission of the photoinitiator and release of free radicals around the spacers coated with the photoinitiator, and

wherein polymerization is automatically initiated by the accelerator lacquer initiators after the liquid crystal and pre-polymer mixture is brought into contact with the accelerator lacquer coated spacers such that polymerization will proceed beginning

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around each spacer coated with the photoinitiator and/or the accelerator lacquer initiator such that polymer is localized to a region surrounding the spacers and along a direction normal to the first substrate and the second substrate.

As to claim 59, relevant prior art of record did not disclose, alone or in combination, a method for manufacturing a liquid crystal display device as claimed, comprising steps of: initiate polymerization and bringing into contact an accelerator lacquer initiator with the mixture of pre-polymer and liquid crystal material, wherein as the polymerization proceeds a phase separation of the polymer and liquid crystal also proceeds, and

after initiation of polymerization and before completion thereof adjusting a rate of diffusion of the mixture of the pre-polymer and the liquid crystal material by at least one of adjusting reaction temperature and adjusting a viscosity of the mixture of the prepolymer and the liquid crystal material to produce variation.

As to claims 20-58 and 60-61, they are directly or indirectly dependant upon claims with allowable subject matter above.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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## Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy L Rude whose telephone number is (571) 272-2301. The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert H Kim can be reached on (571) 272-2293. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

tlr

Timothy L Rude

Examiner
Art/Unit 2874

(4)

Tarifur Chowdhury Primary Examine

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